

## REMARKS

The Final Office Action of November 10, 2008, has been received and reviewed. In conjunction with the contemporaneously filed Request for Continued Examination, the claims are to be amended as previously set forth. All claim amendments and cancellations are made without prejudice or disclaimer. No new matter has been presented. Reconsideration is respectfully requested.

### Rejections under 35 U.S.C. §§ 102(b) and 103(a)

Claims 1, 3, 11, 13, 16, and 27-30 stand rejected under 35 U.S.C. § 102(b) and/or 35 U.S.C. § 103(a) as anticipated and/or obvious over Eyckerman et al. (1999 Eur. Cytokine Netw. 10(4):549-556) (hereinafter “Eyckerman”). Specifically, it was asserted that Eyckerman taught recombinant receptors comprising the mouse leptin receptor with at least one mutation in the cytoplasmic domain and a heterologous myc-tag. Final Office Action of November 10, 2008, at page 4. It was further asserted that the receptor of Eyckerman meets all the structural requirements of the claims, but does not meet the functional element of “wherein the activation of said recombinant receptor is inhibited by binding of a fusion protein to said heterologous bait polypeptide, said fusion protein comprising a prey polypeptide and at least one of an inhibitor of the activation of said recombinant receptor that is selected from the group consisting of a member of the SOCS family, a JAK-phosphatase, and a STAT-phosphatase.” *Id.* at page 4. However, the Examiner asserts that where the products seem identical except for the functional element, the burden shifts to the applicant. *Id.* Applicants note that the rejections of claims 7-30 are moot as those claims are cancelled herein. Applicants respectfully traverse the remaining rejections has hereinafter set forth.

Applicants note that a claim is only anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Applicants respectfully assert that claims 1, 3, 11, 13, and 16 cannot be anticipated by Eyckerman as Eyckerman does not teach each and every element of the claims. For example, Eyckerman does not teach a heterologous bait polypeptide.

The Examiner asserts, at page 4 of the Final Office Action of November 10, 2008, that

the myc-tag present on the recombinant receptors of Eyckerman is equivalent to a heterologous bait polypeptide. Applicants respectfully disagree. For one of ordinary skill in the art, a clear distinction exists between a tag, such as a myc-tag, and a bait; the tag being a short peptide of only a few amino acids, intended as a marker, whereas a bait is a longer oligopeptide that forms a normal part of a protein-protein interaction in a cellular system. Applicants previously submitted arguments pertaining to this point were summarily dismissed by the Office as “arguments of counsel” as no evidence was provided of any such distinction in the art. *Id.* at page 6-7.

Responsive to the Office’s request for evidence, applicants provide herewith *Yeast Two-Hybrid: State of the Art*, Van Criekinge and Beyaert, Bio. Proc. Online, Vol. 2, No. 1 (October 4, 1999) (hereinafter “Van Criekinge”) in the concurrently filed Information Disclosure Statement. Van Criekinge teaches, at page 10, that at least one commonly used two-hybrid vector contains an epitope tag (HA) that is preferably introduced in frame with the target/bait. Another commonly used two-hybrid vector having an HA tag is taught at page 10. Accordingly, the art identifies two-hybrid constructs comprising both a heterologous bait and a tag, each being referred to by their separate functions without any conflation of the two epitopes. Thus, one of ordinary skill in the art understands that a tag, such as HA, is not a bait and that there is a clear distinction between a bait and a tag. Consequently, one of ordinary skill in the art would conclude that Eyckerman does not teach or suggest each and every element of claims 1, 3, 11, 13, and 16.

In view of at least the foregoing, applicants respectfully request the withdrawal of the rejections of claims 1, 3, 11, 13, and 16 under 35 U.S.C. §§ 102(b) and 103(a) and reconsideration of same.

#### Rejections under 35 U.S.C. § 112, first paragraph

Claims 27-30 stand rejected under 35 U.S.C. § 112., first paragraph, as assertedly introducing new matter. Final Office Action of November 10, 2008 at page 10. Although the applicants do not agree that claims 27-30 introduce matter, to expedite prosecution, claims 27-30 are cancelled herein rendering the rejections of those claims moot.

## CONCLUSION

In light of the above amendments and remarks, applicants respectfully request reconsideration of the application. If questions remain after consideration of the foregoing, or if the Office should determine that there are additional issues which might be resolved by a telephone conference, the Office is kindly requested to contact applicants' attorney at the address or telephone number given herein.

Respectfully submitted,



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Enclosures: Request for Continued Examination  
Information Disclosure Statement